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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/537,469

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Thilo Dollase

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EXAMINER

CHANG, VICTOR S

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

10/15/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/537,469	Applicant(s) DOLLASE ET AL.	
	Examiner Victor S. Chang	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6 and 8-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/3/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species A.a. (P(A)-P(B)-P(A)) and Species B.a. (pad) in the reply filed on 10/5/2007 is acknowledged. The traversal is on the ground(s) that “no additional burden would be placed on the Patent Office in searching all the demoted groups together.” This is not found persuasive because each species has distinct structure and/or composition, and there is no evidence that they are obvious variants, clearly separate and additional searches are required. The requirement is still deemed proper and is therefore made FINAL. Further, since crosslinkable functional groups are only present in block polymers having component C in patentably distinct P(A/C) block [specification page 4], claim 3 having crosslinkable functional groups is also nonelected. Claims 1, 2, 4-6 and 8-11 are elected. Claims 3 and 7 are withdrawn.

Claim Objections

2. Claim 10 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

More particularly, the limitation “primer is provided in an area opposite the pressure-sensitive adhesive”, is interpreted as having the primer on the opposite side of support away from

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the PSA, which would be the same structure as claim 5, i.e., providing the primer on the side of support facing away from PSA.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 5 and 10 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for having a primer for improving the anchorage of the PSA to a support [specification, pp. 28, ll. 12-14], does not reasonably provide enablement for having an adhesion promoting primer on the side of support facing away from the PSA. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

Specifically, while it is reasonable to place an adhesion promoting primer to improve the adhesion of PSA to the support, nowhere can the claimed structure be found in the specification. Further, such a claimed structure would have negatively impacted on the use of a roll or a stack pad of the invention by impeding the separation at intended interface properly, if the primer and PSA become actively engaged.

5. Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

More particularly, regarding the refractive index property of the block copolymers, the specification page 9 merely describes:

The acrylate block copolymers used in the invention preferably have an inherent orientation. As a result of this the PSAs obtained possess a preferential direction, the refractive index measured in the preferential direction, n_{MD} , being greater than the refractive index n_{CD} measured in a direction perpendicular to the preferential direction. With particular preference the difference $\Delta n = n_{MD} - n_{CD}$ amounts to at least $1 \cdot 10^{-5}$.

However, such a disclosure lacks any description regarding the required composition for providing an inherent orientation and the resulting refractive indices. Further, the refractive indices n_{MD} and n_{CD} are denoted in common process related symbols of “machine direction” and “cross direction”, which infer that these refractive indices are resultants of process conditions, not an inherent property of the block copolymers. One skilled in the art would not know how to make and/or use the claimed invention.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1, 2, 4-6 and 8-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

More particularly, where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). In the present application, applicants have pointed out that the glass transition temperature (T_g) is

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the softening temperature of an amorphous polymer [specification, pp. 4, ll. 28-29], and it is well known that at a temperature greater than (T_g), an amorphous polymer becomes soft and tacky; and at a temperature below its T_g , an amorphous polymer is hard and non-tacky (adhesion free). For example, an amorphous polymer having a T_g greater than ambient temperature would be described as being “hard” and non-tacky at ambient temperature, whereas an amorphous polymer having a T_g lower than ambient temperature would be described as being “soft” and “tacky”. This common knowledge is in agreement with the general property descriptions of “hard” and “soft” domains in applicants’ specification, i.e., hard domains are adhesion-free or virtually so, and soft domains are adhesive regions [specification, page 3]. However, the plain meaning of the terms “hard” and “soft” has apparently been improperly associated with opposite temperature ranges in claim 1 and in the specification. Specifically, it is unseen that how the “hard polymer blocks” (hard domains) would have a lower T_g than the “soft polymer blocks” (soft domains) in the same block copolymer. Appropriate correction throughout, in accordance to the disclosed compositions and their inherently related properties in the specification, is required in the next reply.

Specification

8. The disclosure is objected to because of the informalities regarding the terms of “hard block polymer” and “soft block polymer” and their improperly associated temperature ranges, as set forth above.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 2, 6, 8, 9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 10-025460 [machine translation].

For the present Office action, since the terms “hard” and “soft” and their associated Tg ranges are contrary to their ordinary plain meanings as set forth above, these limitations are not being considered. The scope of the compositions and related inherent properties of elected species P(A)-P(B)-P(A) are based on the disclosure found in the specification. Specifically, useful monomers of block P(A) are found at page 15, and monomers of block P(B) are found at page 16: monomer A include acrylic and methacrylic esters with alkyl groups having 4 to 14 carbon atoms (e.g., n-butyl acrylate), vinyl esters (e.g., , vinyl acetate), vinyl ethers, vinyl halides, etc.; monomer B include vinylaromatics (e.g., styrene), methyl methacrylate, cyclohexyl methacrylate, etc.

JP ‘460 relates to an acrylic pressure-sensitive adhesive composition. The composition comprises block copolymer represented by the formula (A-B)_a-A, wherein A is a vinyl (co)polymer; B is a (co)polymer of a 1-12C alkyl (meth)acrylate; a = 1 to 10. For example, an A-B-A type block copolymer obtained by copolymerizing n-butyl acrylate polymer blocks with methyl methacrylate block [abstract]. The adhesive can be used to form a pressure sensitive

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adhesive sheet, etc., on one side or both sides of a base material, such as paper, etc. [0058 and 0060].

For claims 1, 2 and 8, JP '460 anticipates all the claimed features.

For claim 6, the use limitation "within a pad of said sheets, comprising at least two of said pressure-sensitive adhesive sheets lying one atop another" has not been given any patentable weight, because the statements of intended use do not serve to distinguish structure over the prior art. *In re Pearson*, 494 F.2d 1399, 1403, 181 USPQ 641, 644 (CCPA 1974).

For claim 9, since JP '460 anticipates the block copolymers as claimed, their refractive indices are deemed to be inherent properties of the same chemistry.

For claim 11, the paper support of an adhesive sheet product inherently has a commercially acceptable color.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 4, 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-025460 [machine translation].

The teachings of JP '460 are again relied upon as set forth above.

For claims 4, 5 and 10, JP '460 is silent about the use of release layer and adhesion promoting primer layer. However, the examiner takes Official notice that these layers are

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common and well known for forming adhesive sheets, motivated by the desire to improve the release property of individual adhesive sheets from a multilayered adhesive pad, or unwind an adhesive strip from an adhesive tape roll; and to enhance the adhesion between the adhesive layer and support, respectively.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S. Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 7:00 am - 5:00 pm, Tuesday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Victor S Chang/
Primary Examiner, Art Unit 1794

10/12/2007